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# Cotton Fiber and Processing Test Results

CROP of

1974



Agricultural Marketing Service  
U.S. DEPARTMENT OF AGRICULTURE  
Memphis, Tenn. 38122 August 16, 1974

This is the first of a series of reports of fiber and processing test results from the 1974 cotton crop. Subsequent reports in this series will follow at approximately two-week intervals during the harvesting season, and will be summarized in a comprehensive report at the end of the season. This series will present data on the same subject as "Summary of Cotton Fiber and Processing Test Results, Crop of 1973", May 1974. These reports are published by the Standardization Section, Cotton Division, Agricultural Marketing Service, U. S. Department of Agriculture, Memphis, Tennessee.

Changes or additions to mailing lists should be sent to:

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UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service  
Cotton Division

COTTON FIBER AND PROCESSING TEST RESULTS, CROP OF 1974

Procedures

The Cotton Division, AMS, has made fiber and processing tests each year on the principal varieties of cotton grown by selected cotton improvement groups in the United States since the 1946 crop. Results of these tests have been published in periodic reports throughout the harvesting season and in a summary report at the end of each crop year. 1/

Cotton fiber and processing test results will be published this season for approximately 137 production areas in the Cotton Belt of the United States. Individual gins are selected in each classing office territory to represent the major varieties produced in commercial quantities. Each selected gin represents an area producing from 5,000 to 150,000 bales annually, and selections are made on a varietal basis. Where possible, no gin selection was made where less than 70 percent of a given variety was planted in the area. However, where commercial production warranted and no gin location with 70 percent of the variety was available, classing offices were allowed to select lots from individual farms to represent the variety. Pure variety gins were selected when available, regardless of production providing the variety was being commercially grown. Test lots are collected at approximately 3-week intervals. Usually 3 to 5 samplings are received from each gin during the harvest season.

Each spinning test lot consists of several classing samples of commercially grown cotton of the same grade and staple length from bales grown in the selected area and harvested at essentially the same time. These lots represent the modal quality of the cotton from the gin at the time the samples are classed. Qualities other than those reported are also available in each area due to normal variations in weather and soil condition, cultural, harvesting and ginning practices.

Fiber and processing test results for the 1974 crop are reported in four staple length groups similar to those used in recent years. The test lots to be included in each group are selected on the basis of normal staple length of the varieties.

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1/ Cotton Fiber and Processing Test Results, Crop of 1973;  
Report No. 1, dated August 31, 1973, through Report No. 12,  
dated February 1, 1974.

<u>Type test and group number</u>	<u>Staple length group</u>	<u>Carding rate in lbs/hr.</u>	<u>Yarn numbers spun</u>	<u>Twist multiplier used</u>
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Carded only:

I	Short	12-1/2	8s and 22s	4.40
II	Medium	9-1/2	22s and 50s	4.00

Carded and combed:

III	Long	6-1/2	22s and 50s	3.80
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Combed only:

IV	Extra Long	4-1/2	50s and 80s	3.60
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The fiber and processing tests on this season's cotton will be performed by the same procedures used for the 1973 cottons. 2/

Discussion of Test Results

The Cotton Division of the Agricultural Marketing Service report the values for the medium staples tested from the South Texas area to date show a slightly shorter average fiber length than a year ago on the first lots tested from this area. Yarns spun from these samples are stronger and have a higher appearance index. Yarn imperfections are fewer and the spinning potential number is higher than on the first lots tested last year.

2/ For a complete description of tests and test procedure see, Summary of Cotton Fiber and Processing Test Results, Crop of 1973, dated May, 1974.

Table 1 --Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1974

Production Area, Classification & Sample Number				Fiber Test Results										Processing Test Results - Carded Yarns									
No	Grade	Stple	32s	Digital Fibrograph		Mike	Fiber Strength		Elon-gat'n 1/8"	S.A. Non-Lint		Color Raw Stock		P & C Waste	Strength		Elongation		Appearance Index		Imprfect'ns		Spin. Potent-ial
				2.5% span	Unif.		Zero Gage	1/8" Gage		Pct	No	Yel	22s or 27 tx		50s or 12 tx	22s or 27 tx	50s or 12 tx	22s or 27 tx	50s or 12 tx	22s or 27 tx	50s or 12 tx		
SOUTHWEST SOUTH TEXAS																							
BROWNSVILLE																							
1	SIM	41	34	1.06	45	4.2	79	22	6.8	2.5	1	3	90 PERCENT	36	6.4	4.8	80	70	21	19	68		
2	SIM	41	34	1.08	47	4.5	80	22	7.1	2.6	1	3	5.4	38	6.2	4.5	90	80	15	11	64		
RIO HONDO																							
1	SIM	41	34	1.07	46	4.2	83	24	6.3	2.3	1	2	85 PERCENT	43	6.3	5.1	110	90	17	11	72		
ROBSTOWN																							
1	MID	31	33	1.06	43	4.1	78	22	6.9	2.3	0	3	95 PERCENT	35	6.2	4.4	100	70	17	12	61		
SAN JUAN																							
1	MID	31	34	1.10	47	4.9	89	23	5.8	1.4	1	3	70 PERCENT	41	5.8	4.3	120	100	10	5	67		
SEBASTIAN																							
1	MID	31	33	1.06	48	5.3	88	25	6.3	2.1	1	4	96 PERCENT	44	6.3	5.0	110	90	10	7	70		

